

City of San Diego Planning & Development Review **Building Development Review** 1222 First Avenue • MS-401 San Diego, CA 92101 (619) 446-5400

Building Newsletter 31-3

Fireplace and Chimney Requirements

Interpretations of State and Local Building Codes 1998 California Building Code: Chapter 31 Revision Date: July 1999

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The following requirements apply to fireplaces and chimneys not constructed in accordance with the requirements of Chapter 31 of the Building Code (CBC).

Acceptable Fireplaces/Vented Decorative Gas Appliances

- A. Fireplaces listed in evaluation reports by the International Conference of Building Officials (ICBO), the National Evaluation Service (NES), Underwriters Laboratories, Inc. (UL) or any other approved testing and listing agency are permissible.
- B. Vented decorative gas appliances are appliances installed for the aesthetic effect of the flames rather than the functional use. They are permitted with the following restrictions:
 - All vented decorative gas appliances must have American Gas Association (AGA) approval. These appliances are approved when used in conjunction with the appropriate UL-approved vent and may be installed in most occupancies. Restrictions are outlined in Section 901 of the Mechanical Code (CMC).
 - 2. Approved vented decorative gas appliances may be free-standing, attached to a wall, or recessed into a wall. They have been tested to insure that the temperatures of adjacent combustible walls and surfaces will not be excessive when the appliance is installed in accordance with the manufacturer's instructions on the base, legs, brackets or other supports supplied as part of the appliance.

II. Acceptable Fireplace Chimneys

- A. Factory-built chimneys which have been approved for use with a fireplace by the ICBO, NES, UL or other approved agencies are acceptable. Installations must be in strict accordance with the terms of their listings and the manufacturers' recommendations.
- B. Metal chimneys conforming to the requirements of Section 814 of the CMC are permitted. Note that unlisted single-wall metal chimneys may not be installed within a dwelling unit in a Group R, Division 3 Occupancy with one exception. A chimney penetrating only a roof or unoccupied attic space may be designed as shown in Figure 1 on the following page.
- C. Chimneys complying with Sections 3102.3 through 3102.4 of the CBC are acceptable.

D. Section 3102.6 requires that metal chimneys be anchored to floors and roof(s) to resist lateral forces.

III. Clearances to Combustible Materials

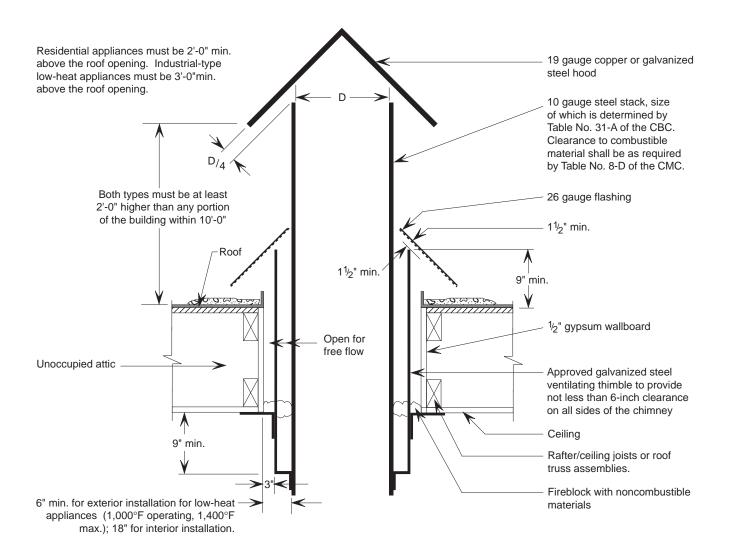
- A. ICBO, NES, UL or other approved fireplaces shall have clearances to combustible materials as specified in the individual approval for each fireplace. Under no circumstances will required clearances be reduced where brick or concrete materials cover combustible wall construction.
- B. Vented decorative gas appliances shall have clearances to combustible material as specified in the AGA, ICBO, NES, UL or other acceptable approval for each appliance.
- C. Factory-built ICBO, NES, UL, or other approved chimneys shall have clearances to combustible materials as specified in the individual approval.

IV. Fireplaces with Gas Logs

Gas logs may be installed in any occupancy not restricted by Section 901 of the CMC provided all of the following conditions are met:

- A. Fireplaces comply with Section 3102.7 of the CBC.
- B. Chimneys comply with Sections 3102.3 through 3102.4 of the CBC, or (within R-3 Occupancies) the detail for a metal chimney shown in Figure 1.
- C. Gas logs are not installed in bedroom areas.
- D. Gas-log assemblies are approved by the AGA and installed in accordance with individual approvals and manufacturers' instructions.
- E. If the fireplace is equipped with a damper, it shall be permanently blocked open to a sufficient amount to prevent spillage of combustion products into the room.
- F. Fireplaces shall not be used as required heating facilities.
- G. Minimum flue passageways shall be not less than 1 square inch per 2,000 Btu/hour input.
- H. Gas logs, when equipped with a pilot, shall have a listed safety shutoff valve located on a wall directly adjacent to the fire place.
- I. Gas-log lighters may be installed in any complying fireplace in any permissible occupancy. Shutoff valves shall be located as required in item H above.

Figure 1/Residential-type metal chimney installation



Notes

- This assembly is permitted to penetrate only a roof or unoccupied attic space.
- 2. The metal gauges shown are the minimum allowed.
- 3. Where detemined necessary by the building official, a substantially constructed spark arrestor (12-gauge minimum) having an area not less than four times the net free area of the chimney it serves must be provided. Openings shall not permit the passage of a sphere greater than ½-inch in diameter nor block the passage of a sphere less than ¾-inch in diameter.